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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,169	06/30/2000	Takayuki Urata	43890-430	9745

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EXAMINER
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PATTERSON, MARC A

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/608,169	<b>Applicant(s)</b> URATA ET AL.	
	<b>Examiner</b> Marc A Patterson	<b>Art Unit</b> 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 13-15 and 65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 13-15 and 65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

#### WITHDRAWN REJECTIONS

1. The 35 U.S.C. 102(b) rejection of Claim 1 as being anticipated by Awata (U.S. Patent No. 5,866,228), of record on page 2 of the previous Action, is withdrawn.
2. The 35 U.S.C. 103(a) rejection of Claims 2 – 3, 13 – 15 and 65 as being unpatentable over Awata (U.S. Patent No. 5,866,228) in view of the Encyclopedia of Polymer Science and Engineering (Volume 12, page 225, 1985), of record on page 3 of the previous Action, is withdrawn.
3. The 35 U.S.C. 103(a) rejection of Claims 2 – 3, 13 – 15 and 65 as being unpatentable over Awata (U.S. Patent No. 5,866,228) in view of Cheng et al (U.S. Patent No. 4,745,015), of record on page 4 of the previous Action, is withdrawn.

#### NEW REJECTIONS

##### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nowobilski et al (U.S. Patent No. 4,726,974) in view of Awata (U.S. Patent No. 5,866,228).

With regard to Claim 1, Nowobilski et al disclose a vacuum heat insulator (insulating enclosure that is evacuated, therefore the inside is evacuated to vacuum; column 4, lines 24 – 34) comprising a bag (column 3, lines 57 – 60) comprising a laminate film (panel; column 4, lines 24 – 26) comprising three layers of plastic (at least one layer of plastic, therefore Nowobilski et al disclose three layers of plastic; column 1, lines 66 – 68) laminated to, and therefore alternating with, three layers of metal (at least one layer of metal, therefore Nowobilski et al disclose three layers of metal; column 1, lines 66 – 68); the plastic is sealable, and is therefore a seal layer, which is the inside layer of the bag (column 2, lines 2 – 8); the plastic is also laminated to the metal, as stated above, and therefore protects against delamination of the metal; the film therefore comprises a first support layer comprising the first layer of plastic, a second deposition layer comprising the first layer of metal and formed on a surface of the support layer, a third protective layer comprising the second layer of plastic and formed on a surface of the deposition layer, and a fourth seal layer; the bag is therefore a laminate bag, and is sealed by a seal. Nowobilski et al fail to disclose a metal layer that is a deposition layer.

Awata teaches a metal oxide layer for a vacuum insulator bag that is laminated by deposition, therefore a deposition layer, for the purpose of obtaining gas barrier property and flexibility (column 4, lines 18 – 23). One of ordinary skill in the art would therefore have recognized the advantage of providing for the deposition of Awata in Nowobilski et al, which is a vacuum insulator bag, depending on the desired gas barrier property and flexibility of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a metal layer that is a deposition layer in Nowobilski et al in order to obtain good adhesion to both layers as taught by Awata.

6. Claims 2 – 3, 13 – 15 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nowobilski et al (U.S. Patent No. 4,726,974) in view of Awata (U.S. Patent No. 5,866,228) and further in view of Pratte et al (U.S. Patent No. 6,127,509).

Nowobilski et al and Awata disclose a laminate film comprising a support layer and protective layer as discussed above. The support layer and protective layer comprise polyimide (column 2, lines 20 – 26) and Nowobilski et al disclose at least one layer of plastic, as stated above, and therefore disclose more than one support layer. With regard to Claims 2 – 3, 13 – 15 and 65, Nowobilski et al and Awata fail to disclose a polyimide having a glass transition point of 100 degrees Celsius or higher.

Pratte et al teach the use of a polyimide for a laminate film (column 1, lines 10 – 16) having a glass transition point of 100 degrees Celsius or higher (column 4, lines 20 – 21) for the purpose of obtaining a film having use in high temperature applications (column 1, lines 19 – 25). One of ordinary skill in the art would therefore have recognized the advantage of providing for the glass transition point of Pratte et al in Nowobilski et al and Awata, which is a laminate film, depending on the desired applicability to high temperature applications of the end product. It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a glass transition point of 100 degrees Celsius or higher

in Nowobilski et al and Awata in order to obtain a film having use in high temperature applications as taught by Pratte et al.

#### ANSWERS TO APPLICANT'S ARGUMENTS

7. Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claim 1 as being anticipated by Awata (U.S. Patent No. 5,866,228), 35 U.S.C. 103(a) rejection of Claims 2 – 3, 13 – 15 and 65 as being anticipated by Awata (U.S. Patent No. 5,866,228) in view of the Encyclopedia of Polymer Science and Engineering (Volume 12, page 225, 1985) and 35 U.S.C. 103(a) rejection of Claims 2 – 3, 13 – 15 and 65 as being anticipated by Awata (U.S. Patent No. 5,866,228) in view of Cheng et al (U.S. Patent No. 4,745,015), of record in the previous Action, have been considered and have been found to be persuasive. The rejections are therefore withdrawn. The new 35 U.S.C. 103(a) rejection of Claim 1 as being unpatentable over Nowobilski et al (U.S. Patent No. 4,726,974) in view of Awata (U.S. Patent No. 5,866,228) and 35 U.S.C. 103(a) rejection of Claims 2 – 3, 13 – 15 and 65 as being unpatentable over Nowobilski et al (U.S. Patent No. 4,726,974) in view of Awata (U.S. Patent No. 5,866,228) and further in view of Pratte et al (U.S. Patent No. 6,127,509), above are directed to amended Claims 1 – 3, 13 – 15 and 65.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Marc Patterson 5/31/05*  
Marc A. Patterson, PhD.  
Examiner  
Art Unit 1772